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(11)

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- (54) 3-(4-(1-Substituted-4-piperazinyl)butyl)-4-thiazolidinone and related compounds
- (57) There are disclosed compounds of the formula,

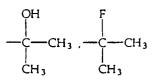
$$R_2$$
 R_1
 R_3
 R_4
 R_4

or aryl except that when R1 is

where n is 0, 1 or 2; A is

$$(X)_m$$

where X in each occurrence is independently hydrogen, halogen, loweralkyl, hydroxy, nitro, loweralkoxy, amino, cyano, trifluoromethyl or methylthio; Y in each occurrence is independently hydrogen, halogen, loweralkyl, hydroxy, nitro, loweralkoxy, amino, cyano, trifluoromethyl or methylthio; K is N or CH; m is 1 or 2; k is 1 or 2; R_1 and R_2 are independently hydrogen, loweralkyl,



or aryl, R_2 is hydrogen, or alternatively $R_1 + R_2$ taken together with the carbon atom to which they are attached form a cyclopentane, cyclopentane, cyclohexane, cycloheptane, pyran, thiopyran, indan or piperidine ring; R_3 and R_4 are independently hydrogen or loweralkyl, or alternatively $R_3 + R_4$ taken together with the carbon atom to which they are attached form a cyclopentane, cyclohexane, cycloheptane, pyran, thiopyran, pyrrolidine or piperidine ring, the term aryl signifying an unsubstituted phenyl group or a phenyl group substituted with 1, 2 or 3 substituents each of which

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being independently loweralkyl, loweralkoxy, hydroxy, halogen, loweralkylthio, cyano, amino or trifluoromethyl, which are useful as antipsychotic, analgesic, anticonvulsant and anxiolytic agents.



PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention EP 95 11 3757 shall be considered, for the purposes of subsequent proceedings, as the European search report

Category	Citation of document with indication, where appropriate,		Relevant	CLASSIFICATION OF THE
Category	of relevant pa	ssages	to claim	APPLICATION (Int.Cl.6)
Y	JOURNAL OF MEDICINAL CHEMISTRY, vol. 35, no. 14, 1992, pages 2712-5, XP000609111 N.J. HRIB ET AL.: "3-[4-[1-(6-Fluorobenzo[b]thiophen-3-yl)-4-piperazinyl]butyl]-2,5,5-trimethyl-4-thiazolidinone: A New Atypical Antipsychotic Agent for the Treatment of Schizophrenia" * page 2713, right-hand column, scheme III, Tables I and II *		1,6	C07D417/00 C07D417/14 A61K31/425
Υ	EP-A-0 483 633 (HOECHST-ROUSSEL PHARMACEUTICALS INC.) * claims 1,6 *		1,6	
A	EP-A-0 316 723 (HOECHST-ROUSSEL PHARMACEUTICALS INC.) * claims 1,11 *		1,6	
A	US-A-5 041 445 (N.S * claims 1,21 *	. HRIB ET AL.)	1,6	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
				C07D
the provis out a mea Claims se Claims se Claims no		European patent application does not comion to such an extent that it is not possible it on the basis of some of the claims		
see				
see	November	Day of any Life of the		Francisco
see	Place of search BERLIN	Date of completion of the search 13 November 199	6 Ha:	Examiner SS, C
X : par Y : par doc		NTS T: theory or print E: earlier patent after the filing other D: document cite L: document cite	ciple underlying the document, but put g date d in the application d for other reasons	SS, C le invention lished on, or



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Remark: Although claim 7
is directed to a method of
treatment of (diagnostic method
practised on) the human/animal body
(Art. 52(4) EPC) the search has been
carried out and based on the
alleged effects of the compound/
composition